

IBM NALAIYA THIRAN
PROFESSIONAL READINESS FOR INNOVATION,
EMPLOYABILITY AND ENTREPRENEURSHIP

PERSONAL EXPENSE TRACKER

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LITERATURE SURVEY

UP Singh, AK Gupta, Dr. B. Balamurugan (2021) - Spending Tracker : A Smart Approach to Track Daily Expenses – Turkish Journal of Computer and Mathematics Education Vol.12 No.6 , 5095-5103

In this paper, a Java GUI based application was proposed to assure that it will help its users to manage the cost of their daily expenditure. It will guide them and aware them of their daily expenses. The proposed design contained the basic modules for adding and viewing expenses, managing expense categories. Supports CRUD operations on expense data.

Pros :

- Category-wise management of expenses
- Daily, monthly, annual basis tracking
- Simple and user-friendly

Cons :

- Lack of visual analytics for expense data
- Lack of support for splitting group expenses
- Supports manual data monitoring only

Prof Miriam Thomas, Lekshmi P, and Dr. Mahalekshmi T (2022) - Expense Tracker - International Journal of Advanced Research in Science, Communication and Technology (IJARSCT) Volume 9, Issue 4, September 2020 ISSN (Online) 2581-9429

Daily Expense Tracker System is designed to keep a track of Income-Expense of an organisation on a day-to-day basis. This System divides the Income based on daily expenses. If exceed day's expense, system will calculate income and will provide new daily expense allowed amount. Daily expense tracking System will generate report at the end of month to show Income-Expense graph. And employees send reports to the manager for verification. Manager send final reports to administrator .Based on the final reports system predict the next month expense . It will helps to manage over all expense and income.

Pros :

- Maintenance of expense data in the form of Excel sheets, CSV files, thereby avoiding entering individual expenses manually.
- Better visual analytics of data for various timelines.
- Supports handling for reimbursements
- Least squares regression, a statistical procedure, is used to predict the expense limits.

Cons :

- Suitable for organization scale, too complex for personal use.
- Expense prediction is not really necessary for small transactions made on personal use.
- Involves the participation of 3 roles – Admin, Manager, Employee

Velmurugan A, Albert Mayan J , Niranjana P and Richard Francis (2020) – Expense Manager Application – Journal of Physics: Conference Series

In this paper, a multi-purpose finance related android application intended to run on android devices is designed efficiently to give the best suggestions for finance planning and could be run-on low-end devices with an application size as less as 10MB. It analyses and studies the pattern expenses in certain category or by distinct kinds of spending that can be used for studying market trends derived using some data mining techniques such as clustering, classification and association. Android Studio, Kotlin and Java, SQLite, Android OS, Figma Designing tools are used.

Pros :

- Tracks all daily transactions, suggesting efficient investment options
- Experience is hassle free and very handy
- User is provided with authenticated finance news

Cons :

- Application is yet modified to make it safe
- Modern mining methods are not used
- More visualization is required

Velmurugan.R , Mrs.P.Usha (2021) - Expense Tracker Application - International Journal of Innovative Research in Technology (IJIRT) Volume 7, Issue 10, March 2021 ISSN: 2349-6002

This is an android based application that allows user to maintain a computerized diary to track expenses on a day-to-day basis to stay on budget and know expenses that is represented via a graphical representation with special features of distributing expenses in different categories suitable for the user. Java, XML, MySQL is used. Filtering transaction views, view analytics and PDF report are also included.

Pros :

- Has various components of updating and viewing users expenditure
- User can track his expenses by choosing a day and using various filtering options to study expenses
- Visualization using pie chart with percentage view shows graphical representation

Cons :

- Doesn't support upcoming android versions.
- If a particular data is deleted, it cannot be viewed again.
- Statistics about income and expense detail of user can be prepared.

Saumya Dubey , Pragya Dubey , Rigved Rishabh Kumar , Aisha Khatoon - Student Expense Tracking Application - IJARIE-ISSN(O)-2395-4396 Vol-8 Issue-2 2022

This is an android application which is used to track the daily expense of a student. It is like a digital diary that keeps record of expenses done by a student. The application keeps track of money spent and the earnings both of the student on day-to-day basis. It also has the feature that it gives warning messages if we are exceeding on our expenses and hence, we can limit our expenses and avoid overspending. If you spend less money than the daily expense allowed amount, the money left after spending is added into user's savings.

Pros:

- This approach effectively keeps away from the manual figuring for trying not to ascertain the pay and cost each month.
- user-friendly

Cons:

- It does not provide any analytics.

Muskaan Sharma, Ayush Bansal , Dr. Raju Ranjan , Shivam Sethi(2021)- A Novel Expense Tracker using Statistical Analysis- International Journal of Innovative Research in Technology (IJIRT) Volume 8, Issue 1, March 2021 ISSN: 2349-6002

In this paper , a approach has been proposed how to efficiently manage house-old budget. This application will allow user to keep track of their expenses. This novel expense tracker uses statistical analysis which are going to keep a track of your expenses and would even give you results accordingly.

Pros:

- This Tracking application generate a statistical analysis of your expenses in a more sorted and easier to understand way.
- It has Smart Analytics like If expenditure is greater than the income then it will calculate how much expenditure should be made next time to balance it all out.
- It shows the history chart of 6 months with graphical Representation.

Cons:

- Suitable for only Personal use.
- It does not incorporate a shared expense group.

Namita Jagtap, Priyanka Joshi, Aditya Kamble (2019)- A Review on Budget Estimator Android Application- International Journal of Innovative Research in Technology (IJIRT) Volume 6, Issue 4, March 2021 ISSN: 2395-0056

The system known as Budget Estimator is designed to manage the application user 's daily expenses in a more efficient and manageable way. This project is about mobile application Expenses system with geo-location tracking, based on the location of the user, it using Google Places, to check, the available store in the area, provides a notification for offers purpose, In term of security design, this system may implement a login authentication such as OTP message to your mobile device, this function may bring more security confidence to user. To reduce manual calculations, we propose an application which is developed by android. this application allows users to maintain a digital automated diary.

Pros:

- In this paper, an algorithm was proposed to show offers in nearby places using geo-location tracking.
- This mobile application with 2-step verification method provides the security to the users.

Cons:

- Suitable for only Personal use.
- It does not provide any analytics.

Atiya Kazi, Praphulla S. Kherade , Raj S. Vilankar , Parag M. Sawant-Expense Tracker ,IRE Journals , May 2021 , Volume 4 Issue 11 , ISSN: 2456-8880

In this approach ,the application keeps the track of the Income and Expenses both of user on a day-to-day basis. This application takes the income of a user and manages its daily expenses so that the user can save money. If you exceed daily expense allowed amount it will give you a warning, so that you don't spend much and that specific day. If you spend less money than the daily expense allowed amount, the money left after spending is added into user's savings. The application generates report of the expenses of each end of the month

Pros:

- This approach effectively keeps away from the manual figuring for trying not to ascertain the pay and cost each month.
- user-friendly

Cons:

- It does not provide any analytics.

S. Chandini, T. Poojitha, D. Ranjith, V.J. Mohammed Akram, M.S. Vani, V. Rajyalakshmi -Online Income and Expense Tracker, International Research Journal of Engineering and Technology (IRJET) Volume 6, Issue 3, March 2019 e-ISSN: 2395-0056, p-ISSN: 2395-0072

It is a web application which is helpful to manage out income and expense as a daily or periodically or else whenever we want to remind and acts as an indicator or reminder example in the fastest world which we can't able to remember what are the things we have to do for the end of month and what are the payments we have to pay for the particular month.

Pros:

- User friendly and data is maintained efficiently
- Generates report at the end of week or month to show Income-Expense via multiple graphs
- There is also an option to view owe and lend expenses which adds or gets deducted from the overall budget according without bothering the user.

Cons:

- Does not provide any option to handle shared expense of a group
- Effort has to be made to include each and every transaction into the input field

Problems identified :

- Poor understanding of the spending patterns due to lack of analytics.
- No support for splitting group expenses, so need to manually calculate the expense share of each member.
- Regular report on the expense data is not provided.

Proposed solutions :

- Various visualizations and analytics can be provided for better understanding of the spending patterns. Category-wise, daily, weekly, monthly, and annual analytics and report can be generated.
- The facility to split equally/unequally group expenses and notify group members the same.